

ORIGINAL ARTICLE

SOCIO DEMOGRAPHIC FACTORS OF PARENTAL STRESS DURING COVID-19 PANDEMIC RELATED LOCKDOWN IN PAKISTAN

Ahmad Bilal, Zahida Khalid, Sana Fatima

Department of Applied Psychology, The Islamia University of Bahawalpur, Bahawalpur, Pakistan

Background: There had been recent Western studies that reported the parental stress during COVID-19 pandemic. The present study was designed with an aim to find out the socio-demographic factors of parental stress in a sample of parents in Punjab province of Pakistan. **Methods:** Four hundred and sixty-six (466) parents were recruited from different cities of Punjab by administering a Google form based cross-sectional survey over social media platforms including WhatsApp and Facebook. The study was conducted from March to May 2020. The Urdu standardized version of Parental Stress Scale was administered as the main measure. Each participating parent was requested to give explicit consent before enrolling for the study. The data was analysed using SPSS-25. **Results:** There were statistically significant differences in parental stress with respect to marital status, age, gender, and employment status of parents. On the other hand, there were no statistically significant differences in parental stress with respect to the number and age of children, and education of the parents. **Conclusion:** There were 7 socio-demographic factors of parental stress. Some of those factors impact parental stress while some other factors did not impact parental stress. Future studies may be conducted with participants from other provinces too and by including other parenting related variables.

Keywords: COVID-19, Parental Stress, Stress, Punjab, Pakistan

Pak J Physiol 2021;17(3):58–61

INTRODUCTION

The world is currently experiencing a new pandemic called Severe Acute Respiratory Syndrome-Coronavirus-2 (SARS-CoV-2) or simply called COVID-19.¹ The WHO imposed Public Health Emergency of International Concern (PHEIC) on 30th January 2020.² As a matter to curtail the spread of COVID-19 pandemic, most countries resorted to lockdown including Pakistan during the 1st wave of the pandemic. The lockdown brought changes in daily routines, adjustment with the remote work style, home-schooling children as schools were shut down during lockdown.³

Living in lockdown is a potentially stressful experience which also affects the parenting practices at home.⁴ The closure of businesses and change in work routine combined with monitoring children at home during the pandemic was the major source of stress for parents.⁵

Recent studies point toward the COVID-19 related parental stress.⁶ A study reported that at least one out of every three parents have experienced the worsening of their mental health during the pandemic.⁷ The new pandemic COVID-19 has brought many stressors, one of them is parental role. Parents experienced stress due to change in parenting practices, the pressure to home school kids, and economic burdens as well.⁸⁻¹⁰ Parental stress may be defined as a kind of psychological reaction that occurs when environmental demands are inconsistent with expectations of self or others or when the parents do not have resources to meet these demands.¹¹ A recent study in Pakistan reported

occurrence of parental stress during COVID-19 pandemic.¹²

The parents who have not directly experienced the pandemic may also get stressed due to COVID-19 pandemic.¹³ The limited interaction and continuous stay at home with a constant monitoring of children and looking after work issues may make parents vulnerable to experience levels of stress.³ The most pronounced stressor experienced by parents during COVID-19 pandemic was change in mood and experience of heightened stress levels.¹⁴ A recent study reported several demographic differences in experience of parental stress during COVID-19 pandemic.¹⁴ The similar study reported that environmental experience of COVID-19 pandemic was the greater source of parental stress.

Despite multitude of work on the psychological aspects of COVID-19 on parents, there is currently lack of empirical research focusing on the demographics of parental stress during COVID-19 pandemic in Pakistan. This lack of research is consistent with previous study as well.¹⁵ The present study was conducted to find out the demographics (gender, age, education, occupation, and marital status of parents; number of children and age of children) of parental stress during COVID-19 pandemic.

METHODOLOGY

The study employed the cross sectional survey research design. The 466 parents, with Mean±SD 34.5±0.71 years of age (fathers=229, mothers=237) from different cities including Rawalpindi, Lahore, Faisalabad, Multan, Dera Ghazi Khan, Bahawalpur, and Rahim Yar

Khan of Punjab Province participated in the online survey administered using Google forms over social media platforms (WhatsApp and Facebook) due to lockdown. The mean age of the parents was around 35 years. The parents living in Punjab province were included in the study while parents living in other provinces or those without internet access were excluded from the study. The study was conducted from March to May 2020.

The data were collected after obtaining the approval from the Research Ethics Committee at the institution of the authors affiliations vide No. REC/B-G4/S20. The participation in the survey implied signing the informed consent as the first part of survey contained informed consent.

The Urdu standardized version of Parental Stress Scale (PSS) was administered to the participants. The original PSS was developed by Berry & Jones in 1995 and had 18 items designed in 5 point likert format. The scores on the PSS range from 18 to 90. The higher scores indicate higher levels of parental stress. The Cronbach Alpha reliability of the scale is 0.83.¹⁶ The locally standardized Urdu version had Cronbach Alpha of 0.81.

The data was analysed on SPSS-25. The analysis was presented by descriptive statistics, independent samples *t*-test, and analysis of variance.

RESULTS

Table-1 shows the socio-demographic characteristics of participants at baseline. There were 466 participants in the study, of which 229 (49%) were fathers and 237 (51%) were mothers. Majority, (106, 22.7%), 128 (27.5%), and 104 (22.3%) of parents belonged to age range of 26–35, 36–45, and 46–55 years respectively. There were only 52 (11.2%) parents of age 56 years or above. The mean age of parents was around 35 years. Most (130, 28%) of them were educated up to Masters and Bachelors (117, 25%). Sixty (13%), and 154 (33%) parents were employed in private and government sectors respectively compared to 30 (6%) unemployed and 139 (30%) stay at home parents. Currently married parents were 430 (92%), 10 (2%) were divorced, and 26 (6%) were widowed; and 91 (20%) parents had 1 child, 174 (37%) had 2–3 children whereas 201 (43%) had 4 children. Majority of children (343, 74%) were under 18 years of age compared to 123 (26%) children of age ≥18 years.

Table-2 describes the result of *t*-tests computed to find out differences in parental stress in parents of younger and older children and between fathers and mothers. The differences were statistically significant for gender ($p < 0.05$) in parental stress of fathers and mothers respectively, although the effect size was small. On the other hand,

there were no statistically significant differences ($p = 0.63$) in parental stress with respect to age of their children.

Table-1: Socio demographic characteristics of participants at baseline (n=466)

Socio Demographic Variables	Baseline Characteristics	n	%
Gender	Fathers	229	49.1
	Mothers	237	50.9
Age Mean±SD	34.5±0.71		
Age of Parents (Years)	18–25	76	16.3
	26–35	106	22.7
	36–45	128	27.5
	46–55	104	22.3
	56+	52	11.2
Education	Matric	103	22.1
	Inter	82	17.6
	Bachelors	117	25.1
	Masters	130	27.9
	MPhil/PhD	34	7.3
Occupations	Stay Home Parents	139	29.8
	Government Jobs	154	33.0
	Business	83	17.8
	Unemployed	30	6.4
	Private Jobs	60	12.9
Parents' Marital Status	Currently Married	430	92.3
	Divorced	10	2.1
	Widowed	26	5.6
No. of Children	1	91	19.5
	2–3	174	37.3
	4	201	43.1
Ages of Children (Years)	1–17 years	343	73.6
	≥18 years	123	26.4

Table-2: Results of several t-tests

Variable	Parental Stress						
	Mean±SD	t	Df	p	LL	UL	Cohen's d
Children							
Younger 1–17 Years (n=343)	38.55±8.49	0.48	464	0.63	-1.32	2.18	0.05
Older ≥18 Years (n=123)	38.12±8.45						
Parents							
Fathers (n=229)	37.56±9.13	-2.18	445.96	0.03	-3.25	-0.16	0.20
Mothers (n=237)	39.27±7.71						

LL=Lower limit, UL=Upper limit

Table-3 shows the results of analysis of variance computed to find out the differences in parental stress with respect to marital status and number of children. The results were statistically significant for marital status [$F(2,463) = 8.19, p = 0.000, \eta^2 = 0.03$], although, effect size was small, while non significant for number of children [$F(2,463) = 0.52, p = 0.59, \eta^2 = 0.00$]. The currently married parents had lower parental stress as compared to divorced or widowed parents.

Table-4 presents the results of analysis of variance computed to find out the differences in

parental stress with respect to age, education, and occupation of parents. The results were statistically significant for age of parents [$F(4,461)=5.83, p=0.000, \eta^2=0.04$], and occupation status [$F(4,461)=7.90, p=0.000, \eta^2=0.06$], although, effect sizes were small while non significant for education of parents [$F(4,461)=0.89, p=0.46, \eta^2=0.00$]. The young and unemployed parents had more parental stress as compared to older and employed parents respectively.

Table-3: Analysis of variance for differences in marital status and number of children (n=466)

Variable	Parental Stress			
	Mean±SD	F(2)	p	η^2
Marital Status of Parents				
Married	38.08±8.23	8.19	0.000	0.03
Divorced	48.40±9.58			
Widowed	40.38±9.79			
No. of Children				
1 Child	38.78±8.67	0.52	0.59	0.00
2-3 Children	38.79±9.17			
4 Children	37.97±7.75			

η^2 =Partial Eta Square

Table-4: Analysis of variance for differences in age, education and occupation (n=466)

Variable	Parental Stress			
	Mean±SD	F(4)	p	η^2
Age of Parents				
18-25 y	42.25±9.51	5.83	0.000	0.04
26-35 y	38.46±8.11			
36-45 y	37.17±7.97			
46-55 y	36.81±7.21			
56+ y	39.17±9.59			
Education of parents				
Matric	38.24±8.55	0.89	0.46	0.00
Inter	36.96±7.92			
Bachelor	38.82±8.18			
Master	39.08±8.65			
MPhil/PhD	38.76±9.80			
Occupation of Parents				
Stay at home	39.57±7.87	7.90	0.000	0.06
Govt: Employed	37.80±8.87			
Business	35.31±7.00			
Unemployed	44.46±9.29			
Private Employed	38.73±8.38			

η^2 =Partial Eta Square

DISCUSSION

The present study was conducted with an aim to find the socio-demographic factors of parental stress in a sample of parents in Punjab province of Pakistan. The present study found that different socio-demographic variables had different effects on parental stress. The parents who had been currently living with their married partners had lower levels of parental stress as compared to divorced or widowed parents indicating that being currently married and living with married partner provides social support. The previous work indicates that the social support in the form of living with the married partner buffers against the stress.¹⁷ Another research indicated that the absence of social

support and dual burden of parenting and work activities made the parents experience more stress levels during COVID-19 pandemic.¹⁴

The age of the parent had a significant effect on parental stress. The young parents had experienced more parental stress than parents in middle age group. Likewise, the parents in old age also exhibited greater parental stress. Both the young age and old age of parents was the predisposing factor for experience of parental stress. The parents in young age lacked in parenting experience which made them vulnerable to experience more parental stress. The results are consistent with previous work.¹⁴

The gender of the parents was a significant factor in parental stress. The mothers experienced greater levels of parental stress as compared to fathers. Increased burden of household chores, including baby sitting and managing partner and elder children at home became the source of stress for female parents. Other studies reported similar results.¹⁴

The employment status of the parents was another factor responsible for parental stress. The unemployed parents had shown the highest levels of parental stress as compared to parents who had been employed. The earlier research indicated that economic recession and unemployment was the biggest source of stress among individuals in a society.¹⁸

On the other hand, there had been other socio-demographic factors which had no role in parental stress during COVID-19 pandemic. These were number of children, ages of children, and education of parents. Both number of children and age of children did not significantly impact parental stress. The parents with 1 or more children or having children less than 18 years of age were not different from those parents having 2 or more children or having children of or above 18 years of age. The education of parents also showed no statistically significant differences in parental stress. The education of the parents also did not determine parental stress. It was due to the fact that most parents who participated in the study were educated.

LIMITATIONS AND RECOMMENDATIONS

The present study was limited to participants from Punjab province only. Both members of a parent dyad could not be recruited. The future studies may be conducted with participants from all over Pakistan and by including other variables of interest related to parenting practices.

CONCLUSION

Marital status, age, gender, and employment status of the parents are among the socio-demographic factors

of parental stress during COVID-19 pandemic that have significant impact. Number and ages of children, and educational status of parents do not have statistically significant impact on parental stress during the pandemic.

ACKNOWLEDGMENTS

We acknowledge the cooperation of the participating parents without whose participation the present study could have not been possible.

REFERENCES

- Li Q, Guan X, Wu P, Wang X, Zhou L, Tong Y, *et al.* Early Transmission Dynamics in Wuhan, China, of Novel Coronavirus-Infected Pneumonia. *N Engl J Med* 2020;382(13):1199–207.
- World Health Organization. Statement on the second meeting of the International Health Regulations (2005). Emergency Committee regarding the outbreak of novel coronavirus (2019-nCoV). Published January 30, 2020. Available at: [https://www.who.int/news/item/30-01-2020-statement-on-the-second-meeting-of-the-international-health-regulations-\(2005\)-emergency-committee-regarding-the-outbreak-of-novel-coronavirus-\(2019-ncov\)](https://www.who.int/news/item/30-01-2020-statement-on-the-second-meeting-of-the-international-health-regulations-(2005)-emergency-committee-regarding-the-outbreak-of-novel-coronavirus-(2019-ncov)) [Accessed April 12, 2020]
- Brooks SK, Webster RK, Smith LE, Woodland L, Wessely S, Greenberg N, *et al.* The psychological impact of quarantine and how to reduce it: Rapid review of the evidence. *Lancet* 2020;395(10227):912–20.
- Lange BC, Callinan LS, Smith MV. Adverse childhood experiences and their relation to parenting stress and parenting practices. *Community Ment Health J* 2019;55(4):651–62.
- Wang G, Zhang Y, Zhao J, Zhang J, Jiang F. Mitigate the effects of home confinement on children during the COVID-19 outbreak. *Lancet* 2020;395(10228):945–7.
- Chung G, Lanier P, Wong PYJ. Mediating effects of parental stress on harsh parenting and parent child relationship during Coronavirus (COVID-19) pandemic in Singapore. *J Fam Violence* 2020;1–12. doi.org/10.1007/s10896-020-00200-1
- Patrick SW, Henkhaus LE, Zickafoose JS, Lovell, K, Halvorson A, Loch S, *et al.* Well-being of parents and children during the COVID-19 pandemic: A national survey. *Pediatrics* 2020;146:e2020016824
- Cuartas J. Heightened risk of child maltreatment amid the COVID-19 pandemic can exacerbate mental health problems for the next generation. *Psychol Trauma* 2020;12(S1):S195–6.
- Griffith AK. Parental burnout and child maltreatment during the covid-19 pandemic. *J Fam Viol* 2020. <http://dx.doi.org/10.1007/s10896-020-00172-2>
- Humphreys KL, Myint MT, Zeanah CH. Increased risk for family violence during the COVID-19 pandemic. *Pediatrics* 2020;145(4):e20200982
- Holly LE, Fenley AR, Kritikos TK, Merson RA, Abidin RR, Langer DA. Evidence-Base update for parenting stress measures in clinical samples. *J Clin Child Adolesc Psychol* 2019;48(5):685–705.
- Imran N, Sharif MI, Iqtadar S, Azeem MW, Aamer I, Liaqat S, Malik S. Parental stress and parenting in times of the COVID-19 pandemic in Pakistan. *J Am Acad Child Adolesc Psychiatry* 2020;59(10):S254.
- Bavel JJV, Baicker K, Boggio PS, Capraro V, Cichocka A, Cikara M, *et al.* Using social and behavioral science to support COVID-19 pandemic response. *Nat Hum Behav* 2020;4(5):460–71.
- Brown SM, Doom JR, Lechuga-Peña S, Watamura SE, Koppels T. Stress and parenting during the global COVID-19 pandemic. *Child Abuse Negl* 2020;110(Pt 2):104699.
- Campbell AM. An increasing risk of family violence during the COVID-19 pandemic: Strengthening community collaborations to save lives. *Forensic Sci Int Rep* 2020;2:100089.
- Berry JO, Jones WH. The Parental Stress Scale: Initial psychometric evidence. *J Soc Pers Relatsh* 1995;12(3):463–472.
- Qadir F, Khalid A, Haqqani S, Zill-e-Huma Z, Medhin G. The association of marital relationship and perceived social support with mental health of women in Pakistan. *BMC Public Health* 2013;13:1150.
- Helliwell JF, Huang H. New measures of the costs of unemployment: Evidence from the subjective well-being of 3.3 million Americans. *Econ Inq* 2014;52(4):1485–502.

Address for Correspondence:

Ahmad Bilal, Assistant Professor, Department of Applied Psychology, The Islamia University of Bahawalpur, Pakistan.
Cell: +92-300-8469524
Email: ahmadbilal4@gmail.com

Received: 19 Dec 2020

Reviewed: 2 Sep 2021

Accepted: 2 Sep 2021

Contribution of Authors:

AB: Conceptualization, revising it critically for intellectual content and final approval

ZK: Conceptualization, data acquisition and analysis, writing manuscript and final approval

SF: Data acquisition and analysis, writing manuscript and final approval

Conflict of Interest: None

Funding Disclosure: The authors received no funding for this study.